AMENDMENTS TO THE CLAIMS

Claims 1-3 (Cancelled)

Claim 4 (Currently Amended) A transmission apparatus comprising: ~~transmitter for transmitting data to a receiver that receives data using at least one pair of conductors, the~~

a receiver ~~comprising:~~ including:

a receiving signal monitoring unit operable to receive an input differential signal from a transmitter via a pair of transmission lines, to monitor at least one of an electric ~~voltages~~ voltage and an electric ~~currents~~ current applied to ~~the~~ said pair of ~~the conductors~~ transmission lines, and to generate a feedback signal; and

a receiving status output unit operable to output ~~data monitored~~ the feedback signal generated by ~~the~~ said receiving signal monitoring unit[[,]] to said transmitter;

~~the~~ said transmitter ~~comprising:~~ including a transmitting signal control unit operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current applied to ~~the~~ said pair of ~~conductors~~ transmission lines according to ~~fed-back signals~~ the feedback signal outputted by ~~the~~ said receiving status output unit of ~~the~~ said receiver.

Claim 5 (Currently Amended) ~~A transmitter as recited in~~ The transmission apparatus of claim 4, wherein said transmitting signal control unit ~~controls according to the fed-back signals~~ is operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current according to the feedback signal such that at least one of a difference of electric voltages and a difference of electric currents ~~outputted from a~~

applied to said pair of ~~conductors~~ transmission lines connected to ~~the~~ said receiver is reduced.

Claim 6 (Currently Amended) A balanced transmission apparatus ~~using at least one pair of conductors, the balanced transmission apparatus~~ comprising[[:]] a receiver and a transmitter,

~~the~~said receiver ~~comprising:~~ including:

_____a receiving signal monitoring unit operable to receive an input differential signal from said transmitter via a pair of transmission lines, to monitor at least one of an electric ~~voltages~~ voltage and an electric ~~currents~~ current applied to ~~the~~ said pair of ~~the conductors~~ transmission lines, and to generate a first feedback signal; and

_____a receiving status output unit operable to output ~~data monitored~~ the first feedback signal generated by said receiving signal monitoring unit, and

~~the~~said transmitter ~~comprising:~~ including:

_____a transmitting signal monitoring unit operable to monitor the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current applied to ~~the~~ said pair of ~~the conductors~~ transmission lines, and to generate a second feedback signal; and

_____a transmitting signal control unit operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current applied to ~~the~~ said pair of ~~conductors~~ transmission lines according to both the second feedback signal and the first feedback signal ~~signals~~ outputted by said transmitting signal monitor unit and ~~fed-back signals outputted by~~ said receiving status output unit, respectively ~~of the receiver~~.

Claim 7 (Currently Amended) ~~A~~The balanced transmission apparatus ~~as recited in~~ of claim 6, wherein

_____said transmitting signal control unit ~~controls~~ is operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current applied to ~~the~~ said pair of ~~the conductors~~ transmission lines such that at least one of a difference ~~between the~~ of electric voltages applied to ~~the~~ said pair of ~~conductors~~ transmission lines and a difference

~~between the~~ of electric currents applied to ~~the~~ said pair of ~~conductors~~ transmission lines is reduced, and

~~wherein~~ said transmitting signal control unit ~~controls according to the fed-back signals~~ is operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current according to the first feedback signal and the second feedback signal such that at least one of a difference of electric voltages and a difference of electric currents ~~outputted from the~~ applied to said pair of ~~conductors~~ transmission lines connected to ~~the~~ said receiver is reduced.

Claim 8 (Currently Amended) ~~A~~The balanced transmission apparatus ~~as recited in~~ of claim 6, wherein said transmitting signal control unit ~~controls~~ is operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current applied to ~~the~~ said pair of ~~the conductors~~ transmission lines such that at least one of a difference ~~between the~~ of electric voltages applied to ~~the~~ said pair of ~~conductors~~ transmission lines and a difference ~~between the~~ of electric currents applied to ~~the~~ said pair of ~~conductors~~ transmission lines is less than a predetermined threshold, and

wherein said transmitting signal control unit ~~controls according to the fed-back signals~~ is operable to control the at least one of the electric ~~voltages~~ voltage and the electric ~~currents~~ current according to the first feedback signal and the second feedback signal such that at least one of a difference of electric voltages and a difference of electric currents ~~outputted from a~~ applied to said pair of ~~conductors~~ transmission lines connected to ~~the~~ said receiver is less than ~~a~~ the predetermined threshold.

Claim 9 (Cancelled)

Claim 10 (New) A transmitter for adjusting a degree of balance of a differential signal and transmitting an adjusted differential signal on a pair of transmission lines, said transmitter comprising:

a transmitting signal monitoring unit operable to monitor at least one of a voltage and a current of the adjusted differential signal transmitted on said pair of transmission lines and to output a feedback signal based on the at least one of the voltage and the current monitored; and

a transmitting signal control unit operable to receive the differential signal and to control the at least one of the voltage and the current applied to said pair of transmission lines according to the differential signal and the feedback signal so as to adjust the degree of balance of the transmitted adjusted differential signal.

Claim 11 (New) The transmitter as recited in claim 10, wherein said transmitting signal control unit is operable to control at least one of the voltage and the current applied to each of said pair of transmission lines such that at least one of a difference of voltages applied to said pair of transmission lines, and a difference of currents applied to said pair of transmission lines is reduced.

Claim 12 (New) A receiver for receiving, from a transmitter and on a pair of transmission lines, an adjusted differential signal having an adjusted degree of balance and generated from a differential signal, said receiver comprising:

a receiving signal monitoring unit operable to receive the adjusted differential signal from the transmitter on said pair of transmission lines, to monitor at least one of a voltage and a current of the adjusted differential signal transmitted on said pair of transmission lines by the transmitter, and to generate a feedback signal based on the at least one of the voltage and the current monitored; and

a receiving status output unit operable to receive the feedback signal from said receiving signal monitoring unit and output, to the transmitter, the feedback signal generated by said receiving signal monitoring unit so as to allow for adjustment of the degree of balance of the at least one of the voltage and the current applied to said pair of transmission lines by the transmitter.

Claim 13 (New) A transmitter for transmitting using a pair of transmission lines, said transmitter comprising:

a unit operable to apply to a first transmission line of said pair of transmission lines at least one of a voltage and a current and apply to a second transmission line of said pair of transmission lines at least one of a voltage and a current, wherein

the at least one of the voltage and the current applied to the first transmission line is different from the at least one of the voltage and the current applied to the second transmission line so as to allow for adjustment of a degree of balance of the at least one of the voltage and the current applied to the first transmission line and the second transmission line.

Claim 14 (New) The balanced transmission apparatus as recited in claim 4, wherein said receiving signal monitoring unit is operable to continuously monitor the at least one of the electric voltage and the electric current applied to said pair of transmission lines, said receiving signal monitoring unit is operable to continuously generate the feedback signal, said receiving status output unit is operable to continuously output the feedback signal generated by said receiving signal monitoring unit, and said transmitting signal control unit is operable to continuously control the at least one of the electric voltage and the electric current applied to said pair of transmission lines according to the feedback signal continuously output by said receiving status output unit.

Claim 15 (New) The balance transmission apparatus as recited in claim 6, wherein said receiving signal monitoring unit is operable to continuously monitor the at least one of the electric voltage and the electric current applied to said pair of transmission lines, said receiving signal monitoring unit is operable to continuously generate the first feedback signal, said receiving status output unit is operable to continuously output the first feedback signal continuously generated by said receiving signal monitoring unit, said transmitting signal monitoring unit is operable to continuously monitor the at least one of the electric voltage and the electric current applied to said pair of transmission lines, said transmitting signal monitoring unit is operable to continuously output the second

feedback signal based on the at least one of the voltage and the current continuously monitored, and said transmitting signal control unit is operable to continuously control the at least one of the electric voltage and the electric current applied to said pair of transmission lines according to the first feedback signal continuously output and the second feedback signal continuously output.

Claim 16 (New) The transmitter as recited in claim 10, wherein said transmitting signal monitoring unit is operable to continuously monitor the at least one of the voltage and the current applied to said pair of transmission lines, said transmitting signal monitoring unit is operable to continuously output the feedback signal based on the at least one of the voltage and the current continuously monitored, and said transmitting signal control unit is operable to continuously control the at least one of the voltage and the current applied to said pair of transmission lines according to the feedback signal continuously output by said transmitting signal monitoring unit.

Claim 17 (New) The receiver as recited in claim 12, wherein said receiving signal monitoring unit is operable to continuously monitor the at least one of the voltage and the current applied to said pair of transmission lines, said receiving signal monitoring unit is operable to continuously generate the feedback signal, said receiving status output unit is operable to continuously output the feedback signal continuously generated by said receiving signal monitoring unit, and said transmitting signal control unit is operable to continuously control the at least one of the voltage and the current applied to said pair of transmission lines according to the feedback signal continuously output by said receiving status output unit.